



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,756	11/17/2003	George S. Pabis	12093/928	3374

26646 7590 06/07/2005

KENYON & KENYON  
ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER
----------

PALABRICA, RICARDO J

ART UNIT	PAPER NUMBER
----------	--------------

3641

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/714,756

Applicant(s)

PABIS ET AL.

Examiner

Rick Palabrica

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 5-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's 4/25/05 Amendment, which directly amends claim 1 and traverses the rejection of claims, is acknowledged. This amendment is in response to the 1/31/05 Office Action.

#### *Response to Arguments*

2. The Examiner rejected claims 1-4 under 35 U.S.C. 112, second paragraph, in the 1/31/05 Office Action, on the ground that several limitations, e.g., "top nozzle" and "guide thimbles", have no proper antecedent bases. The Examiner reasoned that not all "fuel assemblies", which limitation is recited in the preamble of claim 1, have the so-called top nozzle and guide thimbles.

Applicant attempts to overcome said rejection by replacing "fuel assembly" with "pressurized water reactor fuel assembly." This amendment does not correct the cited deficiency. **Not all** pressurized water reactors have so-called "top nozzle" and/or "guide thimbles". See, for example, Radkowsky et al. (U.S. 3,859,165) who disclose a pressurized heavy water reactor that does not include these elements. Radkowsky et al. 's pressurized heavy water reactor is a pressurized water reactor.

Radkowsky et al. also do not show the other elements (e.g., mandrel shaft) cited in said section of the previous Office Action as having no proper antecedent bases.

3. Applicant traversed the use of the combination of Salton et al. and Shallenberger et al. in the rejection of claims based on 35 U.S.C. 103, on the ground that the Office Action "offers no evidence of a motivation for combining the references to provide the

Art Unit: 3641

claimed subject matter, other than "conclusory hindsight, reconstruction and speculation." The Examiner disagrees.

First, the Examiner has shown that Salton et al. discloses an apparatus for lifting a pressurized water reactor fuel assembly that does not stress the top nozzle of the assembly, in the same manner as the Applicant's claims, i.e., by lifting the assembly through a gripper means disposed inside a control rod thimble. The Examiner has shown how each element of Applicant's lifting apparatus reads on Salton et al., with the exception of the divots in the control rod guide thimble.

As stated in the previous Office Action, Salton et al. do not **explicitly** show the so-called "divots". These divots, which are also known in the art as "bulges" or "beads", are inherent means for attaching the guide thimble to the top nozzle. The Examiner could have justifiably declared these so-called "divots" as inherently present in Salton et al. because they are means for attachment of the guide thimble to the top nozzle. If these divots were not present, the guide thimble would not stay in place. Thus, the claims are rejectable based on Salton et al. alone. However, in order to preclude potential questions regarding inherency of this attachment feature, the Examiner chose to cite a secondary reference (Shallenberger et al.) that explicitly teaches and shows the divots being used for thimble attachment, and to combine it with the primary reference (Salton et al.).

To further illustrate that Applicant's "divots" in the guide thimble are inherent in pressurized water reactors, see either Gjertsen et al. (U.S. 4,717,527) or Berglund (U.S. 5,465,282). Applicant's claim language, "divot" reads on: a) Gjertsen et al. 's

Art Unit: 3641

bulges 46 in the guide thimble (see Fig. 8 and col. 6, lines 1+); or b) Berglund's beads 9 in the guide thimble (see Fig. 2 and col. 2, lines 63+).

Second, Applicant's arguments in traversing the Salton et al. - Shallenberger et al. combination are unpersuasive because the Applicant has not shown that the references do not teach what the Examiner has stated they teach, nor, has the Applicant shown that the Examiner's reasoning for and manner of combining the teachings of references is improper or invalid.

Applicant's traverse of Shallenberger et al. is based on his artificially-constructed "strawman" that bears no relation to the teaching in Shallenberger et al. that the Examiner used as basis for rejection of the claims. Applicant alleges that Shallenberger et al. teaches substitution of a non-structural joint for a severed thimble portion. The Examiner disagrees. The teaching used by the Examiner pertains to the inherent divot or bulges in the guide thimble, and not to the non-structural joint substitute.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which

Art Unit: 3641

was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new matter pertains to the added limitation in amended claim 1, i.e., "wherein structural load of the lifted fuel assembly passes through the divots." Underlining provided.

5. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to amended claim 1, the phrase, "structural load of the lifted fuel assembly passes through the divots" implies that the divots have holes or apertures and the so-called "structural load" goes therethrough. There is neither an adequate description nor enabling disclosure of such apertured divots.

6. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The reasons for rejection are the same as those stated in section 3 of the 1/31/05 Office Action, as further clarified in section 2 above.

The claims are misdescriptive and inaccurate because amended claim 1 implies that the divots have aperture or holes, contrary to the specification that discloses no

Art Unit: 3641

such divot configuration. See section 5 above. Thus, the metes and bounds of the claims cannot be determined.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salton et al. (U.S. 4,834,934) in view of either one of Shallenberger et al. (U.S. 4,699,760) or Gjertsen et al. (U.S. 4,717,527) or Berglund (U.S. 5,465,282). Salton et al. disclose the Applicant's claims except for the divots in the guide thimble.

As to the modification of Salton et al. by Shallenberger et al., the reasons are the same as those stated in section 4 of the 1/31/05 Office Action, as further clarified in section 3 above.

As to the modification of Salton et al. by either one of Gjertsen et al. or Berglund, the reasons are the same as those given for the Salton et al. - Shallenberger et al. combination.

As to the new limitation in amended claim 1, i.e., "wherein structural load of the lifted fuel assembly passes through the divots", the Examiner interprets this phrase as, "wherein the weight of the fuel assembly is being carried by and distributed among the

Art Unit: 3641

divots." The combination of Salton et al. with any one of Shallenberger et al. or Gjertsen et al. or Berglund exhibits this manner of carrying the weight of the fuel assembly being lifted from the core.

### ***Claim Objections***

8. Claims 1-4 are objected to because of the reasons given in section 5 of the 1/31/05 Office Action.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



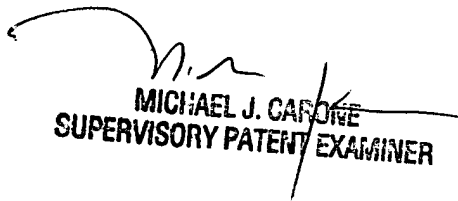
Art Unit: 3641

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:30-5:00, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJP  
May 31, 2005

  
MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER